



US008536441B2

(12) **United States Patent**
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(10) **Patent No.:** **US 8,536,441 B2**
(45) **Date of Patent:** **Sep. 17, 2013**

(54) **SOLAR APPARATUS FOR CONCURRENT HEATING AND POWER GENERATION DUTY**

(58) **Field of Classification Search**
USPC 136/246, 248, 244, 251; 126/572,
126/574, 576, 600, 684, 692
See application file for complete search history.

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 211 days.

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(21) Appl. No.: **12/737,005**

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(22) PCT Filed: **Jul. 6, 2009**

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(86) PCT No.: **PCT/IB2009/006213**

§ 371 (c)(1),
(2), (4) Date: **Dec. 1, 2010**

(57) **ABSTRACT**

(87) PCT Pub. No.: **WO2010/004420**

PCT Pub. Date: **Jan. 14, 2010**

Solar apparatus for concurrent heating and power-generation duty having a base load bearing structure and a load bearing structure supported on the base load bearing structure secured to the plant solar concentrator so as to allow rotation of the concentrator with an established maximum rotation angle, with both a first alternate rotation movement in a circular direction and a horizontal plane along the base load bearing structure, and a second alternate movement along a curved path around a vertical plane orthogonal to the horizontal plane. The solar concentrator is actuatable with said first and second movement during the day by respective first and second actuators, controlled by a microprocessor, depending on the corresponding orientations of the concentrator, detected by first and second sensors, in a manner to orientate the concentrator for receiving maximum solar radiation during the day.

(65) **Prior Publication Data**

US 2011/0162692 A1 Jul. 7, 2011

(30) **Foreign Application Priority Data**

Jul. 11, 2008 (IT) PN2008A0059

(51) **Int. Cl.**
H01L 31/042 (2006.01)

(52) **U.S. Cl.**
USPC 136/248; 136/246

4 Claims, 17 Drawing Sheets

